

Canadian Trade and Commerce, Dept. of

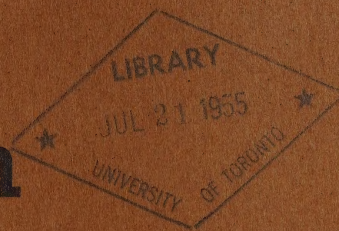


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canadian



wood

at work



CAI TC

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woods exported by Canada

their characteristics and principal uses

8	cedar, eastern white				
8	cedar, western red				
11	cedar, yellow				
11	balsam fir				
14	douglas fir				
14	hemlock, eastern				
17	hemlock, western				
17	larch				
20	pine, jack				
20	pine, red				
23	pine, white				
23	spruce				
26	basswood				
26	birch, white				
29	birch, yellow				
29	elm, rock				
32	maple, sugar				
32	poplar				
		6	barrels	12	bridges
		6	baskets		buildings
		6	battery separators	12	light structural framework
		7	beekeepers' supplies	12	heavy structural framework
			boats and ships	13	sheathing and sub-flooring
		7	decking	13	siding and exterior trim
		7	frame and keel	13	shingles
		9	oars and paddles	15	windows, sash and sills
		9	planking	15	doors
		9	canoe ribs and braces	15	flooring
		10	bobbins, spools and shuttles	16	interior finish and woodwork
		10	bodies and boxes (auto transport)	16	carvings
		10	boxes and crates		



16 clothes pins
18 concrete forms
18 conduits, culverts and drains
18 cutting boards
19 dowels
19 fencing
19 fish-net floats
21 furniture (hardwood)
21 furniture (softwood)
21 greenhouses
22 gun stocks
22 handles
22 ironing boards
24 ladders

24 match splints
24 musical instruments and sounding boards
25 patterns and models
25 picture framing
25 piling, docks, wharves
27 pit props
27 poles and posts
27 plywood (softwood)
28 plywood (hardwood)
28 pulpwood
28 railroad ties
30 scaffolding
30 scientific instruments

30 sewing machines
31 silos
31 spoolwood
31 sporting goods
33 tanks
33 timbers
33 tongue depressors
34 toys and novelties
34 veneers
34 woodenware
additional information
35 grading
35 technical data
36 trade and commerce



canadian

wood is at work in more than fifty countries throughout the world. As diverse as the countries to which it is exported are the ways in which it serves man. It gives him a home and furnishings, structural timbers to thrust towers high in the air or sink shafts deep in the earth. Canadian wood builds factories, it makes the containers for the goods, and it supports the railways that take them to market. It spans rivers, it carries lines of communication, and it fastens the Monday wash. Canadian wood is indispensable to the lives of millions in many parts of the world.

Canada's prominent position in world lumber markets is based on vast timberland resources. Twenty per cent of the total land area of Canada is covered with productive forests. It is estimated that these forests contain close to 200,000,000,000 cubic feet of accessible timber—with proper management, an inexhaustible supply. Roughly three-quarters of this is softwood—the pines, spruce, Douglas fir, western hemlock and western red cedar. The remainder are hardwoods, growing principally in eastern Canada, such as the birches, maple, basswood and poplar.

Thousands of mills process the logs into lumber, plywoods and veneers, ties, poles, hardwood flooring, timber, and other products familiar to those who import or use Canadian woods. The mills range in size from the giants, cutting as much as half a million feet board measure in a shift, to the small portable mills capable of cutting only one or two thousand feet a day.

Historically, the lumbering industry has been one of

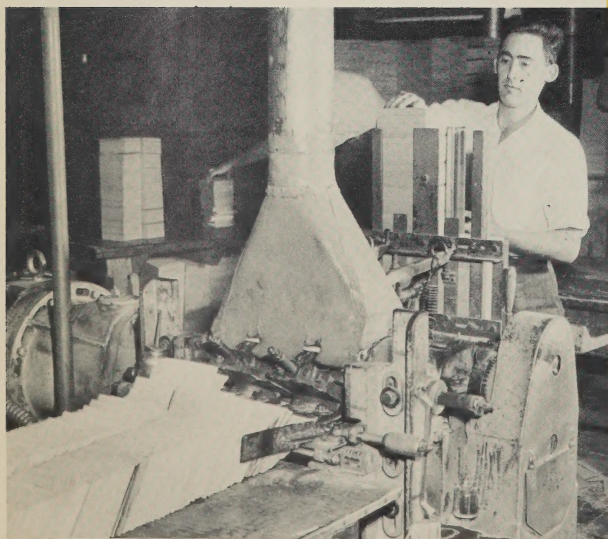


b barrels

Yellow Birch,
Douglas Fir,
Elm, Spruce,
Maple,
Basswood,
Red Pine,
White Pine,
Balsam Fir,
Poplar.

baskets

Birch, Elm,
Basswood,
Spruce, Maple,
Poplar.



battery separators

Douglas Fir,
Yellow Cedar,
Basswood.

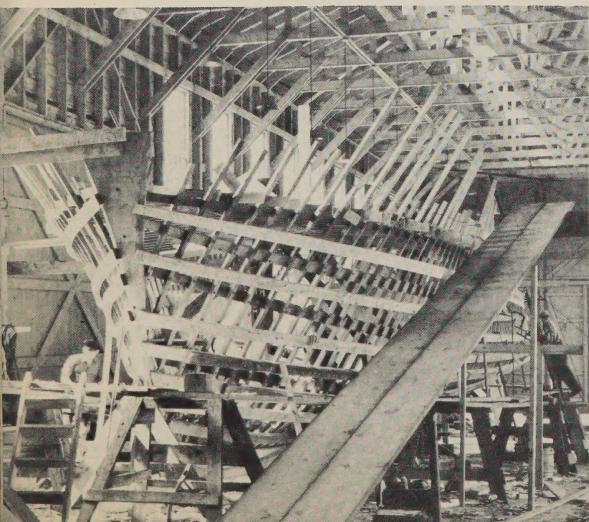
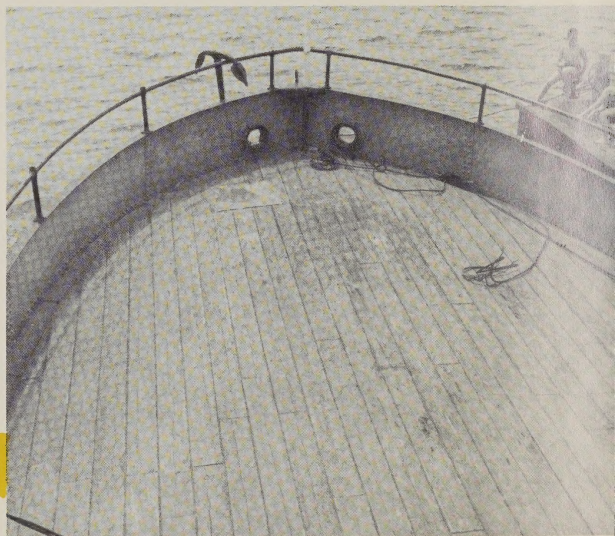


beekeepers' supplies

White Pine,
Basswood,
Western Red Cedar,
Poplar, Spruce.

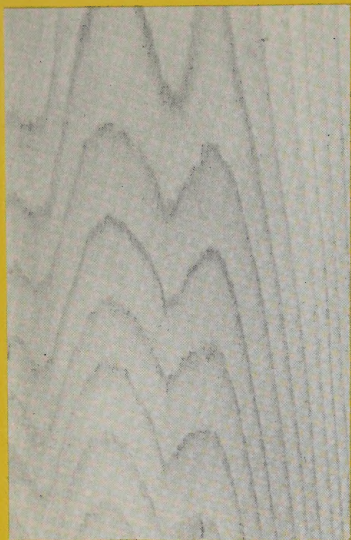
boats and ships (decking)

Red Pine,
White Pine,
Douglas Fir,
Western Hemlock,
Spruce,
Yellow Cedar,
Plywoods.



boats and ships (frame and keel)

Douglas Fir,
Larch,
Yellow Cedar,
Maple,
Yellow Birch,
Spruce.



eastern white cedar

(*thuja occidentalis*)

characteristics

light wood — fine even texture
good working qualities
very low shrinkage — very durable
average tree: one foot diameter,
45 feet high.

principal uses

shingles, boats and canoes,
fence posts and poles,
fish-net floats, garden furniture.



western red cedar

(*thuja plicata*)

characteristics

straight grained — soft and light
excellent working qualities
takes smooth satiny finish
good gluing qualities
extremely durable — low shrinkage
average tree: 3 to 8 feet diameter,
125 to 175 feet high.

principal uses

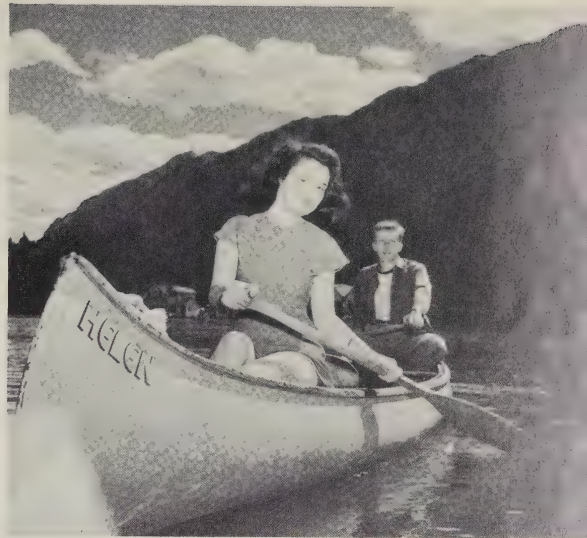
shingles, sills, siding,
house construction, posts,
poles, canoes and boats,
farm buildings.



boats and ships

(oars and paddles)

Spruce,
Maple,
Elm.



Red Pine,
Yellow Cedar,
White Pine,
Larch, Spruce,
Douglas Fir,
Maple,
Birch,
Plywoods.

boats and ships

(planking)



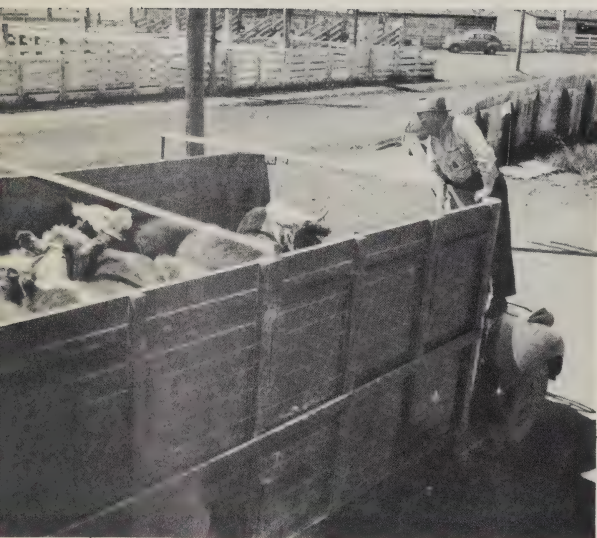
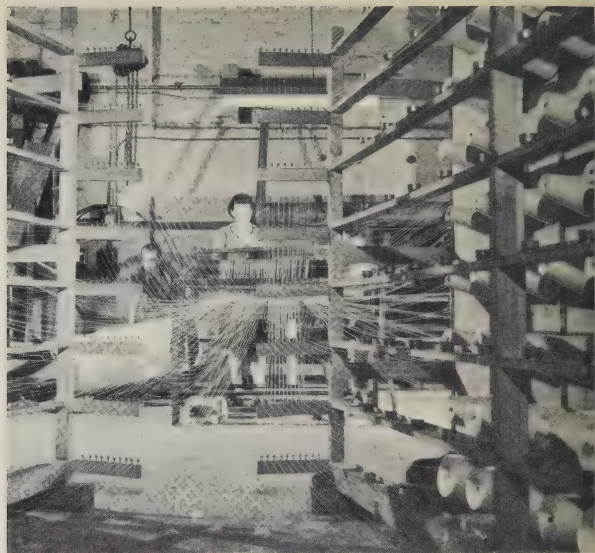
boats and ships

(canoe ribs and braces)

Elm,
Yellow Cedar,
Spruce,
Basswood.

bobbins, spools and shuttles

Maple,
Birch,
Plywoods.



Douglas Fir,
Maple, Birch,
Red Pine,
Western Hemlock,
Spruce,
Jack Pine,
Plywoods.

bodies and boxes

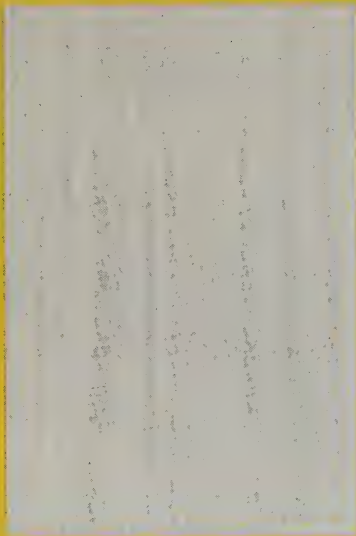
(auto transport)

boxes and crates

Balsam Fir,
Basswood,
Larch,
Poplar,
Maple,
Birch,
Elm,
Cedar,
Plywoods.

Spruce,
Pine,
Hemlock,
Douglas Fir,





yellow cedar

(*chamaecyparis nootkatensis*)

characteristics

fairly hard and strong

good working qualities

low shrinkage and high durability

resistant to acids and termites

average tree: 2 to 3 feet diameter,
80 feet high.

principal uses

battery separators, boats

and canoes, cabinet work,

patterns, tanks, cooling

towers, house construction.

balsam fir

(*abies balsamea*)

characteristics

soft and light — takes a good finish

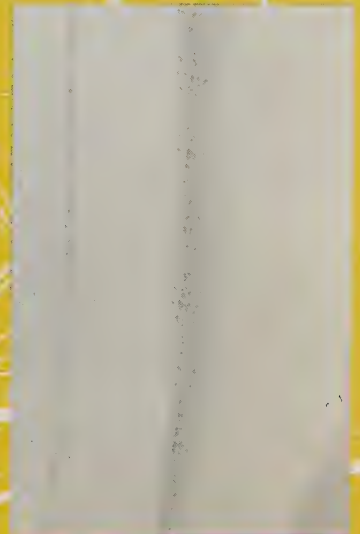
holds nails well — average tree:

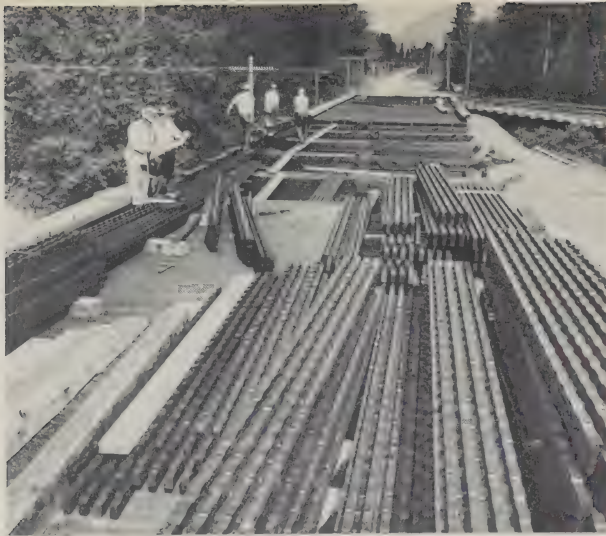
1 to 2 feet diameter, 50 to 60 feet high.

principal uses

pulp, boxes and crates, barrels,

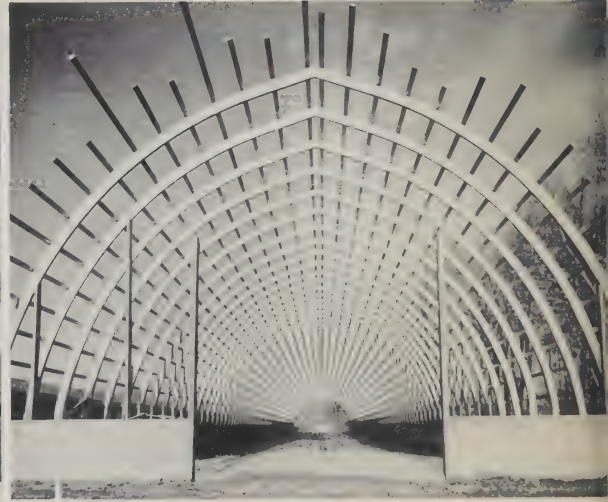
light household construction.





bridges

Douglas Fir,
Larch,
Western Hemlock,
Red Pine,
Spruce,
Jack Pine,
Eastern Hemlock.



buildings

(light structural framework)

Spruce,
Douglas Fir,
Pine,
Hemlock,
Balsam Fir,
Larch,
Western Red Cedar,
Plywoods.

b buildings

(heavy structural
framework)

Douglas Fir,
Red Pine,
Spruce,
Western Hemlock,
Larch,
Jack Pine.

buildings

(sheathing and sub-flooring)

Douglas Fir,
Hemlock,
Pine, Spruce,
Balsam Fir,
Larch,
Western Red Cedar,
Plywoods.



buildings

(siding and exterior trim)

Western Red Cedar, Red Pine,
White Pine, Spruce, Larch,
Douglas Fir, Jack Pine,
Hemlock, Plywoods.



buildings

(shingles)

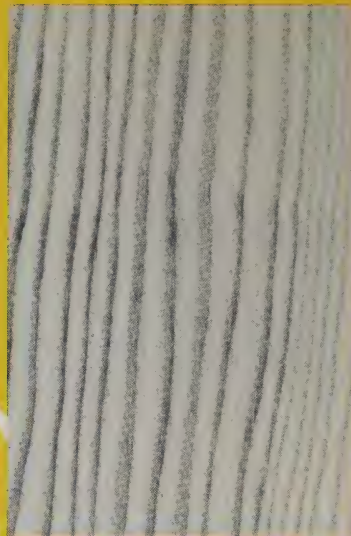
Western Red Cedar,
Eastern White Cedar.





douglas fir

(*pseudotsuga taxifolia*)



characteristics one of hardest and heaviest softwoods — distinctive figure — very strong and durable — seasons readily — average tree: 3 to 6 feet diameter, 150 to 200 feet high.

principal uses heavy structural purposes, piling, mine timbers, poles and masts, railway ties, ship building, house construction, plywood.

eastern hemlock

(*tsuga canadensis*)

characteristics moderate strength — good nail holding properties — moderate shrinkage — average tree: 1½ to 2 feet diameter, 50 to 70 feet high.

principal uses general construction work, bridge planking, railway ties, concrete forms, boxes, pallets, pulp.





buildings

(windows, sash and sills)

White Pine,
Western Red Cedar,
Douglas Fir,
Larch,
Spruce,
Red Pine.

buildings

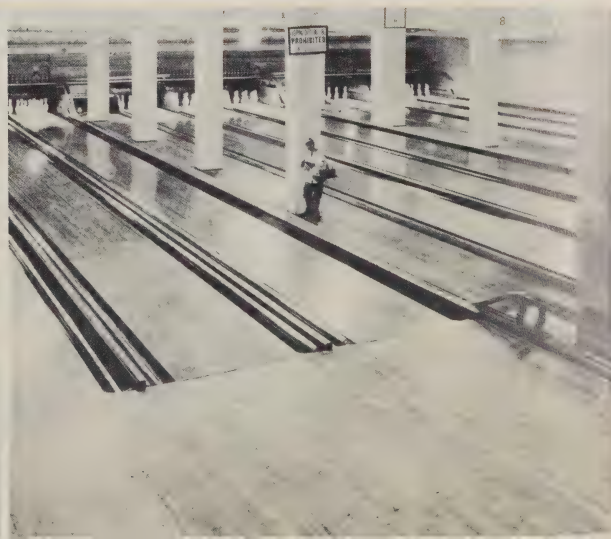
(doors)

White Pine,
Western Red Cedar,
Douglas Fir,
Yellow Birch,
Maple,
Spruce,
Red Pine,
Plywoods.

b buildings

(flooring)

Maple,
Yellow Birch,
Douglas Fir,
Western Hemlock,
Larch,
Red Pine,
Spruce,
White Pine.



buildings

(interior finish and
woodwork)

Yellow Birch,
Douglas Fir,
White Pine,
Western Red Cedar,
Basswood,
Hemlock,
Larch,
Spruce,
Red Pine,
Plywoods.



carvings

White Pine,
Basswood,
Yellow Birch,
Yellow Cedar,
Red Pine.



clothes pins

White Birch,
Yellow Birch,
Maple,
Basswood,
White Pine,
Red Pine.



western hemlock

(*tsuga heterophylla*)

characteristics

strong and hard — distinctive figure
takes a good finish — holds nails well
average tree: 20 to 30 inches diameter,
about 100 feet high

principal uses

general house construction,
interior finish, ladders, railway ties,
boxes, painted furniture, pulp

larch

western larch (*larix occidentalis*)
tamarack (*larix laricina*)

characteristics

strong and hard — moderately durable
W. Larch 2 to 3 feet diameter,
100 to 140 feet high
Tamarack 1 to 2 feet diameter,
6 to 70 feet high

principal uses

railway ties, poles and posts,
piling, boxes and crates,
general house construction

concrete forms

Spruce,
Douglas Fir,
Hemlock,
Pine,
Larch,
Balsam Fir,
Western Red Cedar,
Plywoods.

conduits, culverts and drains

Western Red Cedar,
Douglas Fir,
Larch,
Jack Pine,
Red Pine,
Hemlock,
Spruce,
Plywoods.



cutting boards

Maple,
Yellow Birch.



dowels

White Birch,
Yellow Birch,
Maple,
Douglas Fir,
Elm,
Red Pine.

fish-net floats

fencing

Spruce,
Pine,
Cedar,
Douglas Fir,
Hemlock,
Larch,
Plywoods.

Western Red Cedar.





jack pine

(pinus banksiana)

characteristics

medium hardness — moderately durable
comparatively low shrinkage
works and finishes well — holds nails well
average tree: 10 to 20 inches diameter,
60 to 70 feet high

principal uses

general house construction,
poles and railway ties, mining timbers
and pit props, boxes and crates

red pine

(pinus resinosa)

characteristics

Comparatively light wood
medium durability and shrinkage
easy to work — takes good finish
holds nails and screws well
resists abrasion — average tree:
20 to 30 inches diameter,
75 to 125 feet high

principal uses

heavy structural work,
house construction, poles and piling,
general carpentry, flooring,
boxes and crates





furniture

(hardwood)

Maple,
Birch,
Elm,
Basswood,
Plywoods.

furniture

(softwood)

Douglas Fir,
White Pine,
Red Pine,
Spruce,
Western Red Cedar,
Poplar,
Hemlock,
Plywoods.

greenhouses

White Pine,
Red Pine,
Western Red Cedar,
Douglas Fir,
Yellow Cedar.





gun stocks

Yellow Birch,
Maple.



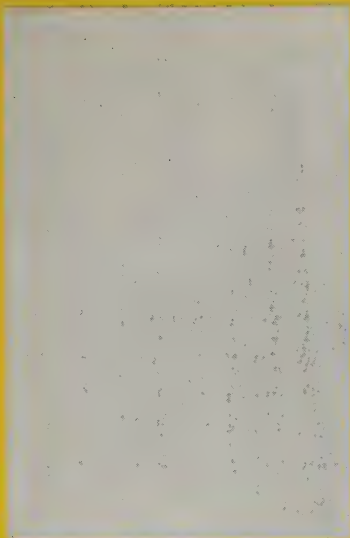
Birch, Maple,
Elm,
Douglas Fir,
Western Hemlock,
Red Pine,
Basswood,
Poplar,
Spruce.

handles



ironing boards

Basswood,
White Pine,
Douglas Fir,
Spruce,
Poplar,
Plywoods.



white pine

(pinus strobus)

characteristics

softest Canadian pine — light wood
durable — low shrinkage
uniform texture — finishes well
works exceptionally well under tools
good nail holding and gluing properties
average tree: 20 to 30 inches diameter,
90 to 125 feet high

principal uses

patterns, windows, general house
construction, cabinet work, boxes,
window blind rollers, interior finish,
garden furniture

characteristics

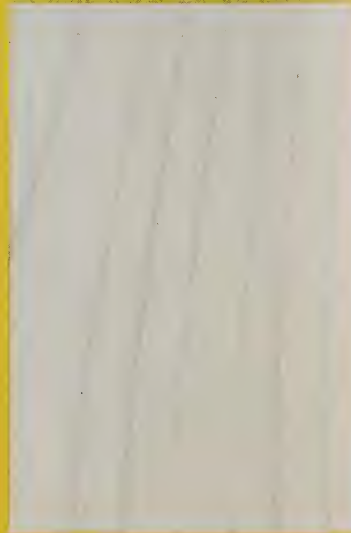
comparatively soft — moderate strength
very resilient — average shrinkage
works well and takes smooth finish
holds nails well — little odour or taste
average tree: 1½ to 2 feet diameter,
about 50 feet high

principal uses

light and medium construction,
formwork, scaffolding, boxes
and containers, piano sounding boards,
general carpentry, pit props,
furniture, ladder stock, pulp

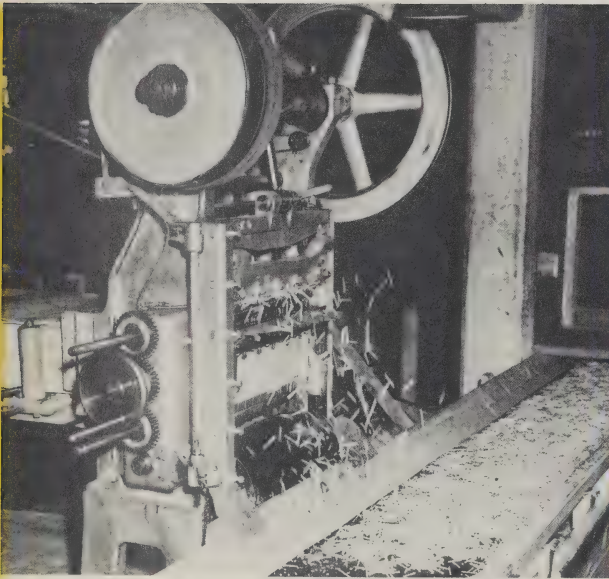
spruce

(picea)



ladders

Elm,
Yellow Birch,
Maple,
Douglas Fir,
Western Hemlock,
Spruce,
White Pine,
Red Pine.



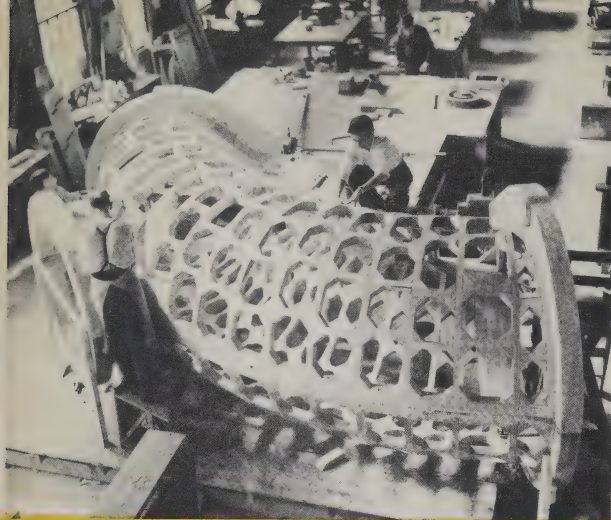
match splints

Poplar.

musical instruments and sounding boards

Maple,
Birch,
Spruce.





patterns and models

White Pine,
Red Pine,
Western Red Cedar,
Basswood,
Plywoods.

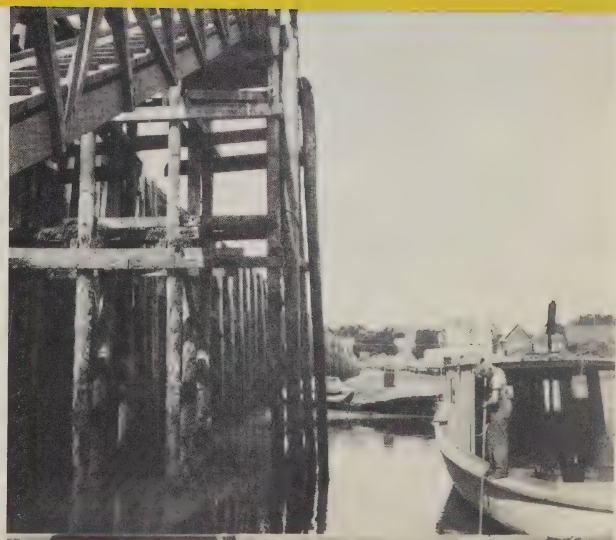


picture framing

White Pine,
Basswood,
Cedar,
Yellow Birch,
Maple.

piling, docks, wharves

Douglas Fir,
Red Pine,
Larch,
Hemlock,
Cedar,
Spruce,
Jack Pine.



basswood

(tilia americana)

characteristics

light hardwood
takes smooth finish
holds paints and lacquers
extremely well
good gluing properties
little odour or taste
average tree: 20 to
30 inches diameter,
60 to 70 feet high

principal uses

furniture, patterns
and models,
interior trim,
piano keys,
woodenware,
baskets, boxes,
venetian blinds,
veneers

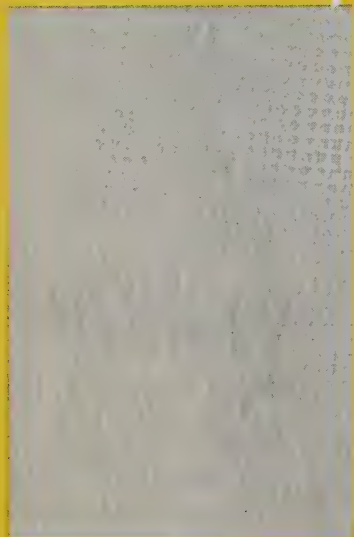


characteristics

medium hardness and weight
good serviceable wood
works exceptionally well
under tools
average tree:
10 to 14 inches diameter,
50 to 60 feet high

principal uses

spools, bobbins,
dowels, woodenware,
furniture, veneers
and plywood



white birch

(betula papyrifera)

P pit props

Spruce,
Jack Pine,
Larch,
Douglas Fir.

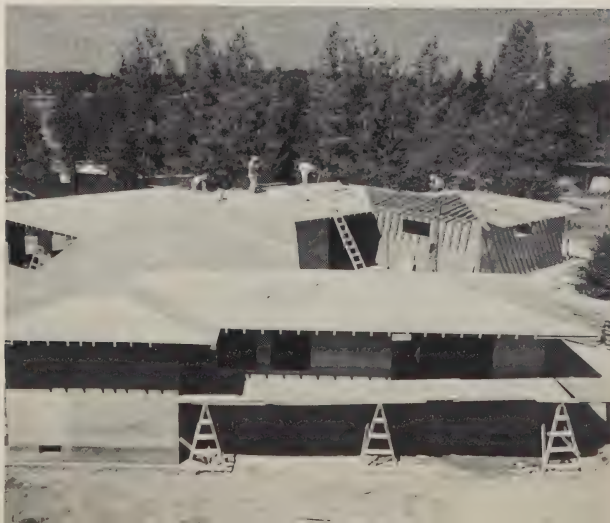
Cedar,
Red Pine,
Douglas Fir,
Hemlock,
Larch,
Spruce.

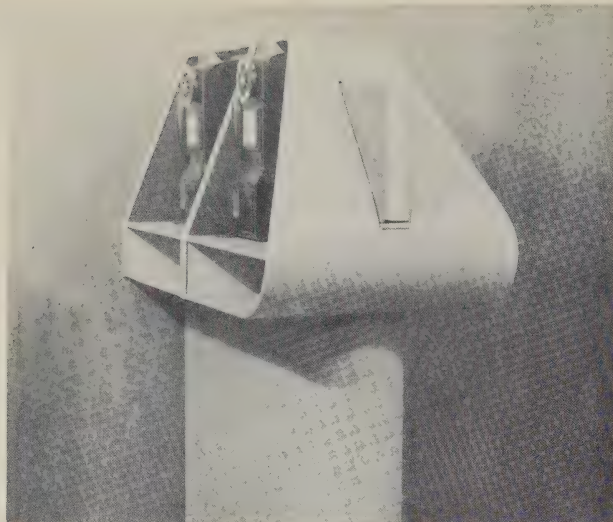
poles and posts



Douglas Fir,
Western Red Cedar,
Western Hemlock.

plywood (softwood)

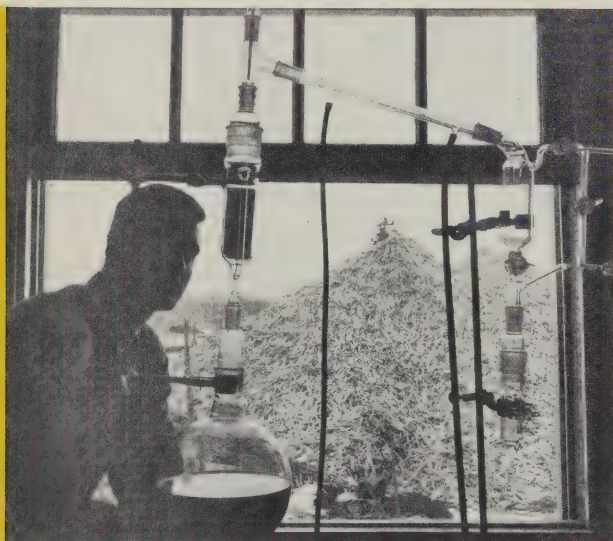




plywood

(hardwood)

Birch,
Basswood,
Maple,
Poplar,
Elm.



pulpwood

Spruce,
Balsam Fir,
Hemlock,
Poplar,
White Birch.



railroad ties

Douglas Fir,
Western Hemlock,
Jack Pine,
Red Pine,
Birch,
Maple.



yellow birch

(betula lutea)



characteristics

hard and heavy wood
very strong and durable
takes smooth finish
holds nails exceptionally well
average tree: about
2 feet diameter,
50 to 60 feet high

principal uses

agricultural implements,
furniture, sporting
equipment, tool handles,
veneers,
cheese drums

characteristics

heavy and hard wearing
high mechanical properties
uniform texture
pleasing subdued figure
takes smooth finish
and polish, easily worked
equal lateral and
linear shrinkage
average tree: 20 to
30 inches diameter,
60 to 80 feet high

principal uses

flooring, furniture,
interior trim
and finishing, doors,
cabinet work,
veneers and plywood
woodenware,
shuttles,
mining timbers,
sporting equipment



rock elm

(ulmus thomasi)



scaffolding

Spruce,
Douglas Fir,
Hemlock,
Balsam Fir,
Larch,
Pine.



Scientific instruments

Maple,
Birch,
White Pine,
Basswood,
Cedar,
Spruce,
Elm.

sewing machines

Birch,
Maple,
Elm,
White Pine.

silos

Douglas Fir,
Spruce,
Western Red Cedar,
Pine,
Hemlock,
Plywoods.

S **poolwood**

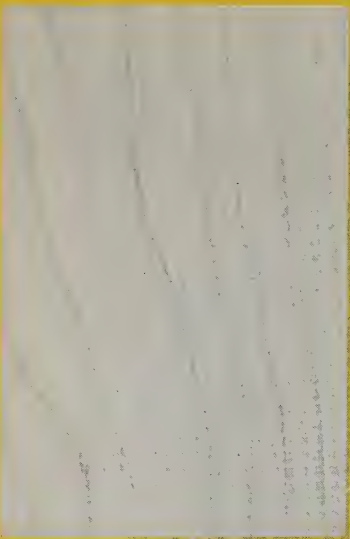
White Birch.



sporting goods

Maple,
Birch,
Elm,
Basswood,
Plywoods.





sugar maple

(acer saccharum)

characteristics

hard and heavy
good resonance
properties
pleasing figure
strong stiff wood
works well
takes smooth surface
and high polish
average tree: 20 to
30 inches diameter
80 to 90 feet high

principal uses

flooring, furniture,
interior finishing,
piano actions,
sporting equipment,
veneers and plywood



characteristics

soft light wood
works well
good nail
holding qualities

principal uses

veneers and
plywood,
boxes,
baskets,
matches,
corestock,
pulp



poplar

(populus)

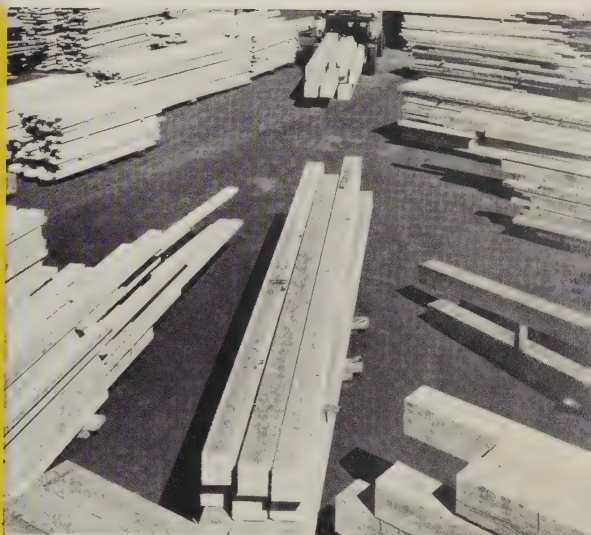


tanks

Douglas Fir,
Western Red Cedar,
Yellow Cedar,
Red Pine,
White Pine,
Spruce,
Hemlock,
Plywoods.

timbers

Douglas Fir,
Spruce,
Red Pine,
Western Hemlock,
Larch,
Western Red Cedar.



tongue depressors

White Birch.



Maple,
Birch,
White Pine,
Spruce,
Basswood,
Plywoods.

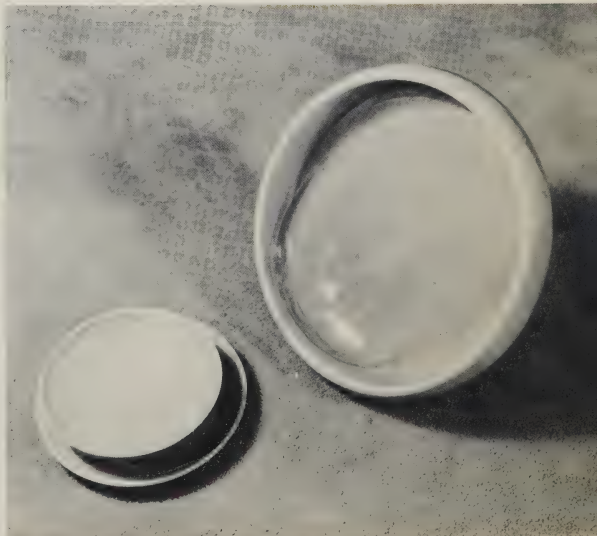
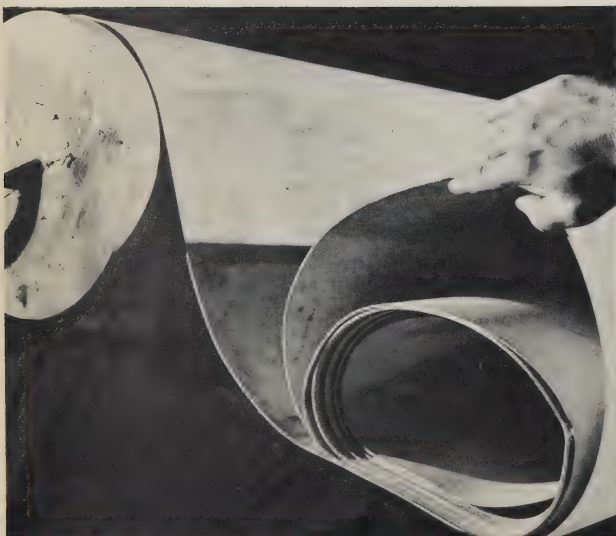
toys and novelties

veneers

Birch,
Elm,
Maple,
Basswood,
Poplar.

W woodenware

Birch,
Maple,
Basswood,
Pine,
Cedar,
Douglas Fir,
Spruce,
Plywoods.



additional information

grading

The principal Canadian lumber associations have established grading rules for lumber. These rules are generally published in booklet form and can be obtained from the following trade organizations:

British Columbia Lumber Manufacturers' Association,
Forest Industries Building,
550 Burrard Street,
Vancouver 1, B.C.

The British Columbia Lumber Manufacturers' Association publishes grading rules for Douglas fir, western hemlock and western red cedar. Other rules in use in British Columbia for these species include those issued by the West Coast Lumbermen's Association, of Portland, Oregon, governing shipments to the United States, and the Pacific Lumber Inspection Bureau, for export by water.

Canadian Lumbermen's Association,
27 Goulbourn Avenue,
Ottawa, Ontario.

The Canadian Lumbermen's Association has rules for the grading of white pine, red pine, jack pine, spruce, balsam fir, eastern hemlock, and hardwood flooring. It has adopted the grading rules for spruce and balsam fir published by the Northeastern Lumber Manufacturers' Association, New York, and the rules for the measurement and inspection of hardwood lumber published by the National Hardwood Lumber Association, Chicago.

Maritime Lumber Bureau,
P.O. Box 189,
Amherst, N.S.

The Maritime Lumber Bureau has established rules for the grading of spruce and balsam fir.

Of interest to buyers of Canadian wood and wood products are the standards prepared by the Canadian Standards Association. For a list of publications dealing with standards for wood and wood products, write to:

Canadian Standards Association,
National Research Building,
Ottawa, Ontario.

technical data

The Forest Products Laboratories Division, Department of Northern Affairs and National Resources, carries out basic and applied research into almost every aspect of wood utilization, and publishes

the results of this research. The publications of the Forest Products Laboratories are grouped under the following broad subject headings:

Mechanical Properties, Panel and Laminated Construction
Plywood, Adhesives and Dielectric Heating
Containers and Packaging
Wood Preservation and Other Treatments
Wood Pathology (including Sap, Stain and Mould Prevention)
Wood Paints and Coatings
Wood Technology, Timber Physics
Wood Uses, Manufacture, and Waste Utilization
Wood as Fuel
Lumber Seasoning
Wood Chemistry
General

For a complete list of these publications, write to:

Forest Products Laboratories Division,
Department of Northern Affairs and National Resources,
Ottawa, Canada.

trade and commerce

Information on Canadian wood and wood products available for export can be obtained from Canadian government commercial representatives located in more than fifty cities throughout the world, or from the Commodities Branch, Department of Trade and Commerce, Ottawa, Canada.

canadian wood at work

is published by the Department of Trade and Commerce, Ottawa, Canada, with the cooperation and assistance of the following organizations:

Forest Products Laboratories, Ottawa
British Columbia Lumber Manufacturers' Association, Vancouver
Canadian Lumbermen's Association, Ottawa
Maritime Lumber Bureau, Amherst

